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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,353	07/27/2001	Francis Pruche	010830-119	6986

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Norman H. Stepno, Esquire
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER	
JIANG, SHAOJIA A	

ART UNIT	PAPER NUMBER
1617	

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/915,353	PRUCHE ET AL.	
	Examiner	Art Unit	
	Shaojia A. Jiang	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2004 and 27 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-25,27,28,30-34 and 45-85* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-25,27,28,30-34 and 45-85* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 23, 2004 has been entered.

This Office Action is a response to Applicant's request for continued examination (RCE) filed November 23, 2004, and amendment and response to the Final Office Action (mailed March 25, 2004), filed September 27, 2004 wherein claims 64-85 are newly submitted and claim 29 is cancelled.

Currently, claims 21-25, 27-28, 30-34, and 45-85 are pending in this application.

Claims 21-25, 27-28, 30-34, and 45-85 are under examination on the merits herein.

This application claims foreign priority to FRANCE Patent Application No. 00/10008, filed: July 28, 2000 under 35 U.S.C. 119(a)-(d). The copy of certified copy of the priority has been filed with the instant Application. It is noted that the no translation of said French Application into English has been provided.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-25, 30-31, 45, 48-49, 51-58, 64-66, 68-69, 71-72, 74-75, 77-78, 80-81, and 83-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Pruche et al. (FR 2787319, equivalent to US 6,409,772).

Pruche et al. (FR 2787319) discloses a method of applying a composition comprising the particular compound of formula (I), such as the instant compounds, i.e., 4,5-dihydroxystilbene-3-O-beta-D glucoside, a physiologically acceptable medium and additives to keratinous materials such as hair, see claims 4, 6, 20-21 and abstract in particular. The amount of the glucosylated stilbene (0.01-10%) reads on the effective amounts recited in the instant claims. Pruche et al. also discloses topically applying the composition therein to skin, e.g., dyeing the skin and dyeing hair.

Response to Argument

Applicant's arguments filed on September 27, 2004 with respect to this rejection of claims made under 35 U.S.C. 102(b) of record stated in the Office Action have been fully considered but they are not deemed persuasive to render the claimed invention patentable over the prior art as further discussed below.

Applicant asserts that "while the specific compound named by the Examiner is in fact named in the '772 patent, the patent encompasses non-glucosylated hydroxystilbenes and glucosylated hydroxystilbenes, indeed the only exemplification

therein is of resveratrol, which is a non-glucosylated hydroxystilbene. The specific compound singled out by the Examiner has been singled out only because it can also be employed in applicants' methods', it has not been singled out by Pruche et al." (emphasis original).

Contrary to Applicant's assertion, Pruche et al. clearly discloses the instant compounds, which are glucosylated hydroxystilbene, such as 4,5-dihydroxystilbene-3-O-beta-D glucoside, specifically disclosed in claim 3 of Pruche et al.

Again, Applicant argues that "applicants are claiming methods, not compositons, and that applicants' methods can differ in many respects from those of Pruche et al.".

Applicants' argument is not found persuasive since Pruche et al. also clearly disclose the use of the same compounds herein for topically applying the composition therein to skin, e.g., dyeing the skin and dyeing hair.

First, given their **broadest** reasonable interpretation during patent examination (see MPEP 2111), dyeing the hair reads on combating signs of aging of the hair follicles by changing the gray (the signs of aging) back to the original color of younger age. Second, Pruche et al. also discloses topically applying the same composition to skin or hair as claimed herein. Any properties exhibited by or benefits provided the use of composition are inherent and are not given patentable weight over the prior art. A chemical composition and its properties are inseparable.

Moreover, Applicants argue the action of the oxidation dye precursons in the dye composition of Pruche et al. Nonetheless, the action of the oxidation dye precursons in the dye composition of the prior art is considered to be merely related to the mechanism

of action for the prior art. Note that a mechanism of action of a treatment would not by itself carry patentable weight if the prior art teaches the same or nearly the same method steps.

Further, if the prior art teaches the identical chemical structure, the properties Applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01. The burden is shifted to Applicant to show that the prior art product does not inherently possess the same properties as instantly claimed product. The prior art teaches application to the skin of compositions containing the same components as instantly claimed, which would inherently treat skin and hair as instantly claimed. Applicant has not provided any evidence of record to show that the prior art compositions do not exhibit the same properties as instantly claimed.

Thus, Pruche et al. anticipates the claimed invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21-25, 27-28, 30-34, 45, 48-60, 64-66, 68-69, 71-72, 74-75, 77-78, 80-81, and 83-84 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Pezzuto et al. (WO 01/30336).

Pezzuto et al. (WO 01/30336) discloses a method for treating or preventing skin conditions such as those associated with sun damage and natural aging comprising topically administering a composition comprising a topical carrier (emulsifiers, solubilizers, emollients, preservatives, water) and a prodrug of resveratrol such as cis or trans resveratrol glucosides which are the instant compounds (see their structures at page 3 in the WO patent, indicating that trans resveratrol glucoside is 4',5-dihydroxystilbene-3-O-beta-D glucoside, see also its names and structure provided by STN, PTO-892). See claims 1-10, 20-21 and 43 in particular. Pezutto et al teaches that resveratrol and its glucosides are art equivalents, see for example claims 5 and 8. Pezzuto et al. also teaches that compounds such as trans or cis-resveratrol, and trans or cis-resveratrol gludocoside have been known to protect low-density lipoproteins against oxidation (see page 1 lines 20-23). Thus, these compounds are known anti-oxidants to be applied to skin.

Response to Argument

Applicant's arguments filed on September 27, 2004 with respect to this rejection of claims made under 35 U.S.C. 102(e) of record stated in the Office Action have been fully considered but they are not deemed persuasive to render the claimed invention patentable over the prior art. These remarks are believed to be addressed by the rejection presented above.

Additionally, Applicants assert that they never admitted that cis-resveratrol glucoside and trans-resveratrol glucoside are particularly preferred by Pezzuto et al. at page 11 of WO 01/30336, in their remarks filed December 12, 2003. Nonetheless, Applicants' statement is on the record (see page 16 of Applicant's remarks). Hence, cis-resveratrol glucoside and trans-resveratrol glucoside, the instant compounds, are particularly preferred by Pezzuto et al. in treating a method for treating or preventing skin conditions such as those associated with sun damage and natural aging. Applicant also argues that Pezzuto et al. do not indicate why these compounds are preferred. Applicant's argument is not convincing. The answer to why or mechanism of action of cis-resveratrol glucoside and trans-resveratrol glucoside in/on the skin is not required to under 35 U.S.C. 102 to anticipate the instant claims. Moreover, Pezzuto's method steps are same as the instant method steps. See *Ex parte Novitski*, 26 USPQ 2d 1389. Moreover, the claiming of a new use, new function or unknown property which is inherently present in the prior art does not make the claim patentable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 21-25, 27-28, 30-34, and 45-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. (WO 99/04747 of record), Pezzuto et al. (WO 01/30336 of record), and Teguo (of record).

Carson et al. (WO 99/04747) teaches that resveratrol, a phytoestogen present in red grapes and wine, is useful in methods of inhibiting the proliferation of keratinocytes and stimulating their differentiation, improving the appearance of wrinkled, lined, dry, flaky, aged or photodamaged skin, improving skin thickness, elasticity, flexibility; radiance, glow and plumpness, see in particular abstract and claims 3-4. Carson et al. (WO 99/04747) also teaches that cosmetic compositions containing grape extract are known in the art, see in particular page 4 lines 23-33.

Carson et al. does not expressly disclose the employment of glucosylated resveratrol, in the prior art method for improving the appearance of wrinkled, lined, dry, flaky, aged or photodamaged skin, improving skin thickness, elasticity, flexibility; radiance, glow and plumpness.

Pezutto et al teaches that resveratrol and its glucosides are art equivalents, i.e., conditions that are responsive to resveratrol are also responsive to its glucosides, see for example claims 1-10.

Teguo teaches that E and Z piceid, E-astringen and E-Z resveratroloside are found in Vitis vinifera and Polygunum cuspidamm root, see page 655.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ glucosylated resveratrol or grape extract in Carson et al.'s methods of treating and/or improving skin conditions.

One of ordinary skill in the art would have been motivated to employ grape extract in Carson et al.'s methods of treating and improving skin because grape extract is known to contain both resveratrol and piceid (also known as glucosylated resveratrol, see also its names and structure provided by STN), known to be useful in cosmetic compositions. Thus, the grape extract composition used in treating skin is seen to clearly provide the motivation for the present invention.

Furthermore the prior art teaches that glucosylated resveratrol is also known to be employed in topical composition used in skin treating compositions.

Response to Argument

Applicant's arguments filed on September 27, 2004 and again Applicant's Exhibits filed on December 12, 2003 with respect to this rejection of claims made under 35 U.S.C. 103(a) of record in the previous Office Action have been fully considered but are not deemed persuasive as to the nonobviousness of the claimed invention over the prior art. These remarks are believed to be addressed by the rejection presented above.

Additionally, Applicant asserts that the presently claimed invention also possesses surprising and unexpected results which confirms its nonobviousness; that is, the presently claimed invention discloses unexpected results and advantages for the use of glycosylated hydroxystilbene. Contrary to Applicant's assertion, the results of glycosylated hydroxystilbene in the composition to apply to skin in the method of treatment herein have been anticipated, taught and suggested by the cited prior art herein. Therefore, the results herein are clearly expected and not unexpected based on

the cited prior art. Moreover, expected beneficial results are evidence of obviousness. See MPEP § 716.02(c).

Further, again, if the prior art teaches the identical chemical structure, the properties Applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01. The burden is shifted to Applicant to show that the prior art product does not inherently possess the same properties as instantly claimed product. The prior art teaches application to the skin of compositions containing the same components as instantly claimed, which would inherently treat skin and hair as instantly claimed. Applicant has not provided any evidence of record to show that the prior art compositions do not exhibit the same properties as instantly claimed.

In view of the rejections to the pending claims set forth above, no claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jiang, whose telephone number is (571)272-0627. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, Ph.D., can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Anna Jiang, Ph.D.
Primary Examiner
Art Unit 1617
February 23, 2005